

said grid of resilient sections comprising substantially all of said inner sole and extending over substantially all of said sole area;

wherein said resilient sections each comprise at least three layers of progressively different softness and resiliency, with the softest and most resilient layer being closest to the foot; and

said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along.

34. Footgear as defined in claim 33 wherein said footgear is a shoe.

35. Footgear as defined in claim 33 wherein said footgear further comprises a heel portion that extends partially up the heel and ankle area of the user.

36. Footgear with pressure relief areas for the foot, said footgear having a sole area extending substantially for the entire area underlying the foot of a user, comprising:

an outer sole,

an inner sole extending substantially over the entire sole area mounted in said footgear above said outer sole, said inner sole having a plurality of removable resilient sections that are removable mounted in said footgear and that are arranged in a grid pattern said removable sections having lower surfaces which are removable secured within said footgear and said sections together forming a substantially smooth surface for engagement by the foot said sections being individually removable from said footgear to provide localized relief to selected areas of the foot;

said resilient sections being directly adjacent to one another to form said grid, with substantially no space in between said sections except when at least one of said sections has been removed;

said grid of resilient sections comprising substantially all of said inner sole and extending substantially over the entire sole area;

wherein said resilient sections each comprise at least three layers of progressively different softness and resiliency, with the softest and most resilient layer being closest to the foot; and

said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along.

37. A pad for footgear with pressure relief areas for the foot, said pad having a sole area extending for substantially the entire area underlying the foot of a user, comprising:

an underlying flexible sheet and an upper resilient inner sole member extending over and being removably secured to said underlying flexible sheet, said upper resilient inner sole member having a substantially uniform thickness and extending substantially over the entire sole area;

said upper resilient inner sole portion being composed of a plurality of resilient sections, said sections being removably secured on their lower surfaces to said underlying flexible sheet and said sections together forming a substantially smooth surface for engagement by the foot, said sections being individually removable to provide localized pressure relief to selected areas of the foot;

wherein said resilient sections each comprise at least three layers of progressively different softness and resiliency, with the softest and most resilient layer being closest to the foot;

whereby a relief zone corresponding to an afflicted zone of a foot is provided when one or more of said sections is removed; and

said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along.

38. Footgear with pressure relief areas for the foot, said footgear having a sole area extending substantially for the entire area underlying the foot of a user comprising:

an outer sole;

an inner sole extending substantially over the entire sole area mounted in said footgear above said outer sole, said inner sole having a plurality of independently vertically movable resilient sections arranged in a grid pattern, said independently vertically movable sections having lower surfaces which are mounted within said footgear and said sections together form a substantially smooth surface for engagement by the foot;

means for independently modifying support of the foot provided at each section location;

said resilient sections being directly adjacent one another to form said grid;

said grid of resilient sections comprising substantially all of said inner sole and extending over substantially all of said sole area;

wherein said resilient sections comprise a material that resists compression-set; and
said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along.

39. Footgear with pressure relief areas for the foot, comprising:

an outer sole;

an inner sole mounted in said footgear above said outer sole, said inner sole having a plurality of independently vertically movable resilient sections arranged in a grid pattern, said independently vertically movable sections having lower surfaces which are separately removably mounted within said footgear, and said sections having upper surfaces which together form a substantially continuous upper surface for engagement by the foot;

said resilient sections being directly adjacent one another to form said grid; and

said grid of resilient sections extending over substantially all of said inner sole;

said sections having a height and width, with the height of said sections being at least equal to the width thereof, to permit swaying of said sections, thereby reducing shear forces on the lower surface of the foot;

said footgear having a heel/ankle portion that extends partially up the heel and ankle area of the user;

said footgear including flaps for holding the foot into the footgear, said flaps extending over at least a portion of the upper surface of the foot from both sides of the foot;

arrangements for holding said flaps together to hold the user's foot into the footgear;

said flaps leaving an opening at the front of the footgear so that the toes of the user may extend out beyond the flaps while still resting on said inner sole;

said upper surface of said sections being directly exposed for direct engagement with the foot of the user or a sock or stocking on the foot of the user; and

said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along.

40. Footgear with pressure relief areas for the foot as defined in claim 39 wherein said inner sole includes an underlying flexible sheet to which said sections are removably secured; and said sections being secured to said sheet, and said inner sole being secured into said shoe by hook and loop type fastening arrangements.

41. Footgear with pressure relief areas for the foot as defined in claim 39 wherein said sections are softer and more resilient adjacent said upper surface as compared with the lower portion of said sections adjacent said lower surfaces.

Sub G 42. Footgear with pressure relief areas for the foot, comprising:
an outer sole;

I an inner sole mounted in said footgear above said outer sole, said inner sole having a plurality of independently vertically movable resilient sections arranged in a grid pattern, said independently vertically movable sections having lower surfaces which are separately removably mounted within said footgear and said sections having upper surfaces which together form an upper surface for engagement by the foot;

said resilient sections being directly adjacent one another to form said grid; and

said grid of resilient sections extending over substantially all of said inner sole;

said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along;

said footgear having a closed heel/ankle portion;

said footgear including upper footgear parts for holding the foot into the footgear, said upper footgear parts extending over at least a portion of the upper surface of the foot from both sides of the foot; and

said upper surface of said resilient sections being directly exposed for direct engagement with the foot of the user or a sock or stocking on the foot of the user.

43. Footgear with pressure relief areas for the foot, comprising:

an outer sole;

an inner sole mounted in said footgear above said outer sole, said inner sole having a plurality of independently vertically movable resilient sections arranged in a grid pattern, said independently vertically movable sections having lower surfaces which are separately removably

mounted within said footgear, and said sections having upper surfaces which together form an upper surface for engagement by the foot;

said resilient sections being directly adjacent one another to form said grid; and

said grid of resilient sections extending over substantially all of said inner sole;

said footgear having a closed heel/ankle portion;

said footgear including upper footgear surfaces for holding the foot into the footgear, said upper footgear surfaces extending over at least a portion of the upper surface of the foot from both sides of the foot;

arrangements for holding said upper footgear surfaces together to hold the user's foot into the footgear;

said upper surface of said resilient sections being directly exposed for direct engagement with the foot of the user or a sock or stocking on the foot of the user; and

said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along.

44. Footgear with pressure relief areas for the foot, comprising:

an outer sole;

an inner sole mounted in said footgear above said outer sole, said inner sole having a plurality of independently vertically movable resilient sections arranged in a grid pattern, said independently vertically movable sections having lower surfaces which are separately removably mounted within said footgear, and said sections having upper surfaces which together form an upper surface for engagement by the foot;

said resilient sections being directly adjacent one another to form said grid; and

said grid of resilient sections extending over substantially all of said inner sole;

said footgear having a closed heel/ankle portion;

said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along; and

said upper surface of said sections being directly exposed for direct engagement with the foot of the user or a sock or stocking on the foot of the user.

45. Footgear with pressure relief areas for the foot, comprising:

an outer sole;

an inner sole mounted in said footgear above said outer sole, said inner sole having a plurality of independently vertically movable resilient sections arranged in a grid pattern, said independently vertically movable sections having lower surfaces which are separately removably mounted within said footgear and said sections having upper surfaces which together form an upper surface for engagement by the foot;

said resilient sections being directly adjacent one another to form said grid; and

said grid of resilient sections extending over substantially all of said inner sole;

said upper surface of said sections being directly exposed for direct engagement with the foot of the user or a sock or stocking on the foot of the user; and

said grid pattern of resilient sections constituting a multiplicity of sections that sway laterally independently of one another in response to forces applied by the foot, thereby reducing shear stresses on the bottom of a foot as the user walks along.

46. Footgear with pressure relief areas for the foot as defined in claim 45 wherein said inner sole includes an underlying flexible sheet to which said sections are removably secured; and said sections being secured to said sheet, and said inner sole being secured into said footgear by hook and loop type fastening arrangements.

47. Footgear with pressure relief areas for the foot as defined in claim 45 wherein said sections are softer and more resilient adjacent said upper surface as compared with the lower portion of said sections adjacent said lower surfaces.

48. Footgear with pressure relief areas for the foot, comprising:

an outer sole;

an inner sole mounted in said footgear above said outer sole, said inner sole having a plurality of independently vertically movable resilient sections arranged in a grid pattern, said independently vertically movable sections having lower surfaces which are separately removably mounted within said footgear and said sections having upper surfaces which together form an upper surface for engagement by the foot;

said resilient sections being directly adjacent one another to form said grid; and

said grid of resilient sections extending over substantially all of said inner sole;